Would the Office kindly replace old paragraphs 3 and 5 through 9 on page 4 as follows.

Figures 1a to 1j are graphs indicating soil pH and the number of microsclerotia germinated as well as NH_3 concentration in soil, NO_2^- and NO_3^- content in two different soils;

Figures 3a, 3b and 3c are graphs showing microsclerotia germinated in a soil amended with various amounts of urea;

Figures 4a through 4h are graphs showing the effect with and without the nitrification inhibitor DCD;

Figures 5a through 5d are graphs showing the number of microsclerotia germinated and HNO_2 concentration;

Figures 6a to 6f are graphs showing microsclerotia germinated, soil pH and HNO_2 concentration of a soil amended with various amounts of $(NH_4)_2SO_4$, with and without a nitrification inhibitor;

Figure 7 is a graph illustrating the number of microsclerotia germinated after being exposed for two weeks to various concentrations of NH_3;

Would the Office kindly replace paragraphs 1 through 6 on page 5 as follows.

Figure 8 is a graph illustrating the number of microsclerotia germinated for various time counts after exposure to various concentrations of NH_3;

Figure 9 is a graph illustrating the number of microsclerotia germinated at various times after being exposed to various concentrations of HNO_2 and a citric acid buffer;

Figure 10 is a graph illustrating the number of microsclerotia germinated after exposure to various concentrations of 30 mL HNO_2 and a citric acid buffer;

Figure 11 is a graph illustrating the peak concentration of NH_3 for a soil amended with 2% MBM;

Figure 12 is a graph illustrating soil pH in response to H_2SO_4;

Figures 13a through 13j are graphs illustrating the number of microsclerotia germinated, soil pH, NO_2^- and NO_3^- content and HNO_2 concentration in a soil solution and two different soils;

Figures 14a and 14b show the germination of microsclerotia after submergence in a citric acid buffered solution at differing pHs;

Figures 15a to 15f show percent colony forming units of different types of spores after submergence in citric acid buffered solution containing various levels of HNO_2.

Would the Office kindly add the following title on page 5 after the paragraph starting with "Figures 15a to 15f".

DETAILED DESCRIPTION OF THE INVENTION

Would the Office kindly replace paragraph 3 on page 6 as follows.

B2

Ammonia in excess of 65 mg N kg^{-1} soil (20 m*M* NH_3) coincided with a rapid loss in the viability of microsclerotia (**Fig. 1a to 1j**). In two experiments MBM or soya meal (SM) were added to various concentrations (0, 0.25, 0.5, 1, and 2% weight/weight) to soils from two locations namely, Beauseart and Thorndale. Quite high levels of ammonia accumulated in the Beauseart soil amended to 2%, but none

was detected in the Thorndale soil. The viability of microsclerotia remained above 60% in Thorndale soil compared to less than 10% in Beauseart soil amended to 2% (weight/weight). When 1% MBM or SM was added to Beauseart soil a gradual decline in

Would the Office kindly replace paragraph 2 on page 7 as follows.

The Thorndale soil amended to 2% MBM or SM failed to accumulate sufficient NH_3 to kill microsclerotia. This provided the opportunity to confirm NH_3 as responsible for killing of microsclerotia by inducing high levels of NH_3 in the Thorndale soil by determining the survival of microsclerotia. This approach consisted of adding high rates of MBM to the Thorndale soil. Thus MBM was applied at the rates of 0,2 and 4% (weight/weight). The 2% amendment resulted in negligible NH_3 accumulation and survival of microsclerotia greater than 50% by the end of the study **(Fig. 2a to 2e)**. In contrast at 4% MBM, NH_3 accumulated to above 150 m*M* one week following amendment and continued to the end of the study. This corresponded to complete death of microsclerotia.

Would the Office kindly replace paragraph 2 on page 19 as follows.

An example of the importance of nitrification rate in producing HNO_2 is evident in a study in which 400 or 800 mg N kg^{-1} as $(NH_4)_2SO_4$ was added to Beauseart and Mackenzie soils. The Beauseart soil was air-dried and stored for 1.5 years prior to initiation of the experiment. The Mackenzie soil was recently collected and stored at 4°C and at field moisture content. Recently collected Beauseart soil was shown previously to generate HNO_2 in response to $(NH_4)_2SO_4$ addition **(Fig. 5a to**